TF
5
I61
M7

BULLETIN

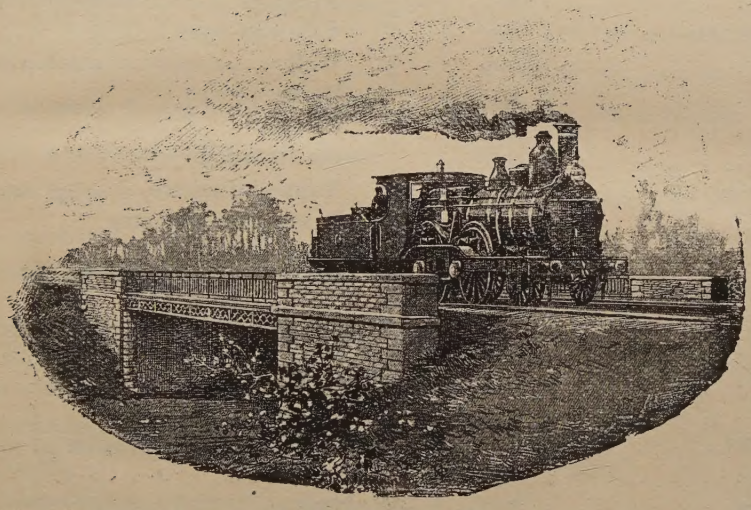
OF THE

INTERNATIONAL RAILWAY CONGRESS

ASSOCIATION

(ENGLISH EDITION)

[385. (05]



Vol. X. — 1928.

PUBLISHER : M. WEISSENBRUCH Co., Ltd., Printer to the King,
49, rue du Poinçon, Brussels.

SUBSCRIPTIONS MAY BE SENT ALSO TO P. S. KING AND SON, Ltd.
PARLIAMENTARY AND GENERAL BOOKSELLERS
14, Great Smith Street, Westminster, S. W., London.

The Permanent Commission of the Association is not responsible for the opinions expressed in the articles published in the Bulletin.

All original articles and papers published in the BULLETIN are copyright, except with the consent of the authors and the Committee.

NOTICE TO READERS

LIST OF ABBREVIATIONS OF MEASURES, ETC., USED IN THE *BULLETIN*

Kilometre	km.	Hour	h.
Metre	m.	Minute	m.
Centimetre	cm.	Second	s.
Square kilometre	km^2.	Kilogrammetre	Kg.-M.
Square metre	m^2.	Kilowatt	kw.
Square centimetre	cm^2.	Kilowatt-hour	kw.-h.
Hectare	ha.	Watt	w.
Are	a.	Horse power	H. P.
Centiare	ca.	Per cent	%
Cubic metre	m^3.	Per thousand	‰
Cubic centimetre	cm^3.	Tonne-kilometre	tkm.
Stere	st.	Passenger-kilometre	p.-km.
Hectolitre	hl.	Train-kilometre	tr.-km.
Litre	l.	Franc	fr.
Centilitre	cl.	Centime	c.
Degree	°	Lire	L.
Minute	′	Centesimo	c.
Second	″	Pound sterling	£.
Tonne (French)	t.	Shilling	sh.
Ton (English)	ton.	Penny	d.
Hundredweight	cwt.	Dollar	$.
Kilogramme	kgr.	Cent	ct.
Gramme	gr.	Mark	mk.
Centigramme	cgr.	Pfennig	pf.

656.06
INT
v. 10 cop. 2

CONTENTS

OF THE

10th YEAR OF THE ENGLISH EDITION.

	PAGES.	NUMBERS of plates and figures.	NUMBERS of the decimal classification.
No. 1. — January 1928.			
. **Appliances for braking wagons** in marshalling yards **controlled from a distance**, by L. CADIS	5	Figs. 1 to 5, pp. 6 and 8.	625 .258 (.44) & 656. 259 (.44)
. **The wear of tyres and rails**, by E. GUIRAUD	11	Figs. 1 to 3, pp. 12 to 15.	625 .143.3 & 625 .212
. Developments in **locomotive drafting**, by Dr. W. F. M. GOSS.	17	Figs. 1 to 3, pp. 18 and 20.	621 .133.5
. A new undertaking in **apprentice training**, by H. ROBBINS. .	23	...	385 .586 (.73)
. The **automatic block system** in the United States	37	Figs. 1 to 52, pp. 38 to 81.	656 .256.3 (.73)
. MISCELLANEOUS INFORMATION :			
1. **White-metalling plant** for the Central Argentine Railway	85	Figs. 1 and 2, pp. 86 and 87.	621 .85 (.82)
2. **Operating results** of the Italian State Railways for the year 1925-1926	88	...	385 .113 (.45)
. NEW BOOKS AND PUBLICATIONS :			
25 Jahre Schweizerische Bundesbahnen (1902-1927) [25 years of the Swiss Federal Railways (1902-1927)], by Dr. A. WELTI	92	...	385. (09.3 (.494)
Problemi ferroviari italiani. — Costruzioni, elettrificazioni, esercizio (Railway problems in Italy. — Construction, electrification and operation), by F. CORINI . . .	93	...	385. (09.1 .45)
I. MONTHLY BIBLIOGRAPHY OF RAILWAYS :			
I. Books	1	...	016 .385. (02
II. Periodicals	4	...	016 .385. (05
No. 2. — February 1928.			
I. **Standardisation of unified design of locomotives** of the German Railways, by Georges HARCAVI	95	Figs. 1 to 41, pp. 97 to 114.	621 .132.1 (.43)
I. **Automatic block signalling** organisation on the Netherland State Railways, by J. H. VERSTEGEN.	116	Figs. 1 to 18, pp. 119 to 142.	656 .256.3 (.492)
I. Swiss **railway electrification results**, by Roger T. SMITH . .	145	Figs. 1 and 2, p. 147.	385 .113 (.491) & 621 .33 (.494

970744

No. 2. — February 1928 (Continued).	PAGES.	NUMBERS of plates and figures.	NUMBERS of the decimal classification.
IV. Some notes on **unexplained derailments**, by P. Sedgfield. .	150	Figs. 1 to 8, pp. 154 to 166.	656 .281. (01
V. **Signalling on electric tramways**, by Roger Vente	167	Figs. 1 to 11, pp. 170 to 180.	625 .61 & 656 .256
VI. Monthly bibliography of railways :			
I. Books.	15	...	016 .385. (02
II. Periodicals	17	...	016 .385. (05
No. 3. — March 1928.			
I. **British locomotives** in 1927 (designs and work), by J. F. Gairns.	185	Figs. 1 to 6, pp. 186 to 192.	621 .132.1 (.42)
II. The regulation of **hours of duty** of the employees in the Operating Departments of the Swiss Federal Railways (A study of a code of laws), by Georges Harcavi	200	...	385 .581 (.494)
III. **The German Railways during the second financial year** of the German Railway Company (1926) as revealed in report No. 5 of the Inspector of the German Railways to the Reparations Committee	225	...	385 .113 (.43)
IV. **Railway and motor competition** in Switzerland	247	...	.656 .1 (.494) & 656 .2 (.494)
V. Miscellaneous information :			
1. Mails by underground. Post Office (London) **Tube Railway**	252	Figs. 1 to 5, pp. 253 to 256.	625 .4 (.42)
2. The **evolution of track** on American railways, as depicted in exhibits displayed at the Centenary Exhibition of the Baltimore & Ohio at Halethorpe, Md.	257	Figs. 6 to 13, pp. 258 to 260.	625 .14 (09 (.73)
3. Road-rail traffic on the London Midland & Scottish Railway	260	Figs. 14 to 21, pp. 262 and 263.	625 .245 (.42) & 656 .281 (.42)
4. **Locomotive weights and axle loads**	265	...	621 .135. (01 (.42)
VI. Official information issued by the Permanent Commission of the International Railway Congress Association :			
Questions for discussion at the Madrid session (1930) with the names of the reporters.	267	...	385. (06.111
VII. Monthly bibliography of railways :			
I. Books.	29	...	016 .385. (02
II. Periodicals.	32	...	016 .385. (05
No. 4. — April 1928.			
I. A contribution to the study of **rail corrugation**, by Ch. Frémont	275	Figs. 1 to 4, pp. 276 and 277.	625 .143.3
II. Interstate Commerce Commission (U. S. A.). — Report of the Director of the Bureau of Safety in re investigation of an **accident** which occurred on the St. Louis-San-Francisco Railway near Victoria, Miss., on 27 October 1925 . . .	280	Figs. 1 to 55, pp. 283 to 337.	625 .143.3 (.73) & 656 .281 (.73)

No. 4. — April 1928 (Continued).	PAGES.	NUMBERS of plates and figures.	NUMBERS of the decimal classification.
nneling at Musconetcong now and fifty years ago	343	Figs. 1 to 19, pp. 344 to 356.	625 .13 (.73)
ISCELLANEOUS INFORMATION :			
1. Means for **improving steel rails**	358	Figs. 1 to 6, p. 359.	625 .143.2
2. **African railways and gauges**	361	Fig. 7, p. 362.	385. (09.1 (.6) & 625 .176 (.6)
3. **The proposed Trans-Saharan railway**	365	Fig. 8, p. 366.	385. (01 (.6)
ONTHLY BIBLIOGRAPHY OF RAILWAYS :			
I. Books	45	...	016. 385. (02
II. Periodicals	48	...	016. 385. 05
No. 5. — May 1928.			
e railway formula for extra-light ultra-high speed high capacity transportation, by Louis Hirschauer and Augustin Talon	369	Figs. 1 to 4, pp. 370 to 377.	625 .4 (01
earing plates with ribs in permanent way work, by Dr. Th. Buchholz	386	Figs. 1 to 8, pp. 389 to 401.	625 .143.5 (.43)
e correction of curves on railways, by N. Giovene	406	Figs. 1 to 3, pp. 407 and 409.	625 .113
eating and ventilation of passenger cars, by Edward A. Russell	411	Figs 1 and 2, p. 415.	625 .234 (.73)
he Schmidt-Henschel **high pressure locomotive**	418	Figs. 1 to 4, pp. 420 to 423.	621 .132.3 (.43) & 621 .134.3 (.43)
000 H. P. Ljungström **turbine locomotive**	429	Figs. 1 to 17, pp. 431 to 438.	621 .132.8 (.42)
-organisation of methods of carrying out repairs in the shops at the locomotive depots of the Paris Orleans Railway Company, by J. Pezeu	441	...	621 .7 (.44)
EW BOOKS AND PUBLICATIONS :			
Voitures et wagons. — Matériel, freinage, éclairage, chauffage (Carriages and wagons. — Construction, brakes, lighting, heating), by J. Netter	450	...	625 .2 (02
ONTHLY BIBLIOGRAPHY OF RAILWAYS :			
I. Books	59	...	016. 385. (02
II. Periodicals	63	...	016. 385. (05
No. 6. — June 1928.			
egeneration and its effect on virtual lengths on **electric railways**, by Felice Corini	453	Figs. 1 to 7, pp. 455 to 469.	621. 33 (01
What one year's service on **concrete roadbed** has shown, by Paul Chipman	471	Figs. 1 to 3, pp. 472 and 474.	625 .14 (.73)
he use of colonial **timber for railway sleepers**	479	...	625 .142.2 (.44)

No. 6. — June 1928 (Continued).	PAGES.	NUMBERS of plates and figures.	NUMBERS of the decimal classification.
IV. **Cleaning passenger car equipment**, by F. W. Stevens.	488	...	625 .236.2 (.73)
V. The **lighting of railroad yards**, by H. E. Mahan and R. J. Swackhamer	491	Figs. 1 to 4, pp. 494 and 495.	656 .215 (.73)
VI. Comprehensive reports speed **yard operations** at Selkirk.	497	Figs. 1 and 2, pp. 500 to 502.	656 .212.5 (.73)
VII. Pennsylvania Railroad experiments with **budget for purchases**	505	Figs. 1 to 6, pp. 505 to 513.	621. 139 (.73), 625 .18 (.73) & 625 .27 (.73)
VIII. Freight car **derailments**, by T. H. Symington	517	Figs. 1 to 5, pp. 518 and 522.	656. 281. (01
IX. Annual statement for 1926 of the **working of the French State Railways**	526	...	385. 113 (.44)
X. Miscellaneous information :			
A dual side-pivot drop-door air **dump car**	534	Fig. 1, p. 534.	625 .245 (.73)
XI. Monthly bibliography of railways :			
I. Books	77	...	016. 385. (02
II. Periodicals	79	...	016. 385. (05
No. 7. — July 1928.			
I. The main **passenger station building** of the new Milan station, by Alberto Fava	537	Figs. 1 to 9, pp. 539 to 549.	656 .211.5 (.45)
II. The **manufacture of sound rails** by the Courthéoux method of rolling, by Louis Pichard.	550	Figs. 1 to 10, pp. 552 to 557.	625 .143.2
III. **Reconstruction** of a large railway **engineering depot**.	558	Figs. 1 to 9, pp. 560 to 567.	625 .17 (.42), 656 .212.5 (.42) & 725 .33 (.42)
IV. **Electric express passenger locomotive** for the Great Indian Peninsula Railway	569	Figs. 1 to 5, pp. 570 and 572.	621 .335 (.54)
V. **Car retarders** at Mechanicville	574	Figs. 1 to 6, pp. 574 to 580.	625 .258 (.73) & 656 .259 (.73)
VI. An ingenious **semi-automatic signalling** installation	581	Figs. 1 to 14, pp. 584 to 593.	656 .256 (.42)
VII. **Speed signal aspects. Flashing lights** in railway working, by C. W. Prescott	594	...	656 .253
VIII. Some **lessons of the Sevenoaks accident**, by C. F. Dendy Marshall	598	...	621 .135. (01 & 625 .14 (01
IX. **Railway road services** in France. Developments of the Paris, Lyons and Mediterranean Railway autocar system.	602	Figs. 1 to 3, pp. 603 and 606.	656 .1 (.44) & 656 .2 (.44)
X. Miscellaneous information :			
1. **The World's railways** during the years 1922, 1923, 1924 and 1925	608	...	313 .385 (.3)
2. A comparison of British and French **train speeds**.	612	...	656 .222.1 (.42 + .44)
3. Effect of unsprung car weight on **track wear**	615	Figs. 1 to 3, pp. 617 and 618.	625 .143.3 (.43).
XI. Monthly bibliography of railways :			
I. Books	91	...	016 .385. (02
II. Periodicals	93	...	016 .385. (05

No. 8. — August 1928.	PAGES.	NUMBERS of plates and figures.	NUMBERS of the decimal classification.
The centralisation and the simplification of **mileage statistics** and the rational solution of the problem on the Swiss Federal Railways, by Georges HARCAVI	619	Figs. 1 to 36, pp. 621 to 655.	313 : 656 .222 (.494)
Irregular vibratory movements of electric locomotives with inclined connecting rods, by Engineer-Doctor Kurt VOSSIUS.	657	Figs. 1 to 5, pp. 658 to 664.	621 .335
The **reorganisation of Crewe locomotive works** (Paper and discussion), by Captain H. P. M. BEAMES	665	Figs. 1 to 11, pp. 667 to 676.	621 .138.5 (.42) & 725 .33 (.42)
The **longitudinal shop**	682	...	621 .138.5 & 725 .33
Car retarders at Selkirk yard, by R. B. ELSWORTH	684	Fig. 1, p. 685.	625 .258 (.73) & 656 .259 (.73)
Railways of Japan	689	Figs. 1 to 8, pp. 694 to 703.	385. (09 (.52)
MISCELLANEOUS INFORMATION :			
Locomotive tender with side corridor, London and North Eastern Railway	713	Figs. 1 to 4, pp. 713 and 714.	621 .136.1 (.42)
MONTHLY BIBLIOGRAPHY OF RAILWAYS :			
I. Books	101	...	016 .385. (02
II. Periodicals	103	...	016 .385. (05

No. 9. — September 1928.			
The present position as regards the question of **dynamic influences on railway bridges**, by A. RONSSE and R. DESPRETS.	717	...	624. (01
The new **steel rolling stock for express trains** of the French Northern Railway Company, by Mr. DE CASO	724	Figs. 1 to 19, pp. 725 to 749.	625 .232 (.44)
Negative or reversed segregation and white stain, by L. PICHARD	751	Figs. 1 to 5, pp. 753 and 756.	62. (01 & 669 .1
First **all-welded truss railroad bridge** is put in service	757	Figs. 1 to 10, pp. 758 to 763.	621 .392 (.73) & 624 .32 (.73)
A generalized method for **traverse surveys** is open country, by A. H. DOUGLAS	764	Figs. 1 to 16, pp. 766 to 785.	526 & 625 .111
Notes on **railway survey**, by G. W. N. ROSE	788	...	526 & 625 .111
Tunnel atmosphere tests on Chesapeake and Ohio Railroad.	804	...	625 .13 (.73)
MONTHLY BIBLIOGRAPHY OF RAILWAYS :			
I. Books	117	...	016 .385. (02
II. Periodicals	119	...	016 .385. (05

No. 10. — October 1928.

	PAGES.	NUMBERS of plates and figures.	NUMBERS of the decimal classification.
I. **Improvements introduced by the Italian State Railways**, by Luigi Tosti	809	Figs. 1 to 14, pp. 810 to 828.	385. (09.1 (.45)
II. French regulations for the calculation and the testing of **metal bridges**	834	...	624. (01 (.44)
III. The German regulations for the calculation of **metal road bridges**	848	...	624. (01 (.43)
IV. Simplified methods in the preparation of **schemes for roads and railways**, by Domenico Ruggeri	851	Figs. 1 and 2, p. 852.	625 .11
V. **Nickel steel for locomotive boilers**, by Charles McKnight.	853	Figs. 1 to 7, pp. 855 and 856.	621 .133.3 (.71) & 669 1. (
VI. Calculating the **stopping distances of trains**, by G. E. Terwilliger	864	...	625 .251
VII. 311-lever **power signal frame** for London Bridge, Southern Railway	869	Figs. 1 to 8, pp. 870 to 875.	656 .257 (.42)
VIII. **Yard costs** cut 17 per cent	877	Figs. 1 to 4, pp. 878 and 879	625 .258 (.73) & 656 .259 (
IX. Miscellaneous information :			
1. **Silicon steel for constructional use.**	884	...	624 .92 & 669 .1
2. **Railway wagons** with collapsible roofs, Swedish State Railways, by A. Paulson	885	Figs. 1 and 2, p. 886.	625 .243 (.485)
3. **Pulverized coal burning locomotive** built in Germany, by Dr. Alfred Gradenwitz	887	Figs. 3 and 4, pp. 887 to 889.	621 .132.8(.43) & 621 .133.1(
4. 500 B. H. P. **oil-electric train** for the London Midland & Scottish Railway	891	Fig. 5, p. 892.	621 .335 (.42) & 621 .43 (.4
5. Association of Electrical Engineers graduates of the Montefiore Electrotechnical Institute, rue Saint-Gilles, 31, at Liége, **Foundation of the George Montefiore triennial prize**	894	...	385. (06.2
X. Obituary :			
Frank Percy Johnson **Patenall**	896	...	385. (09.2)
XI. New books and publications :			
Traité théorique et pratique des distributions et canalisations d'électricité, d'eau, de vapeur et de gaz (Theoretical and practical treatise on the distribution of electricity, water, steam and gas), by Etienne Pacoret	897	...	621 .3 (02. 532. (02. 621 .1 & 665. (02
Reichsbahn-Handbuch 1927 (Handbook of the State Railways), by the Central Administration of the German State Railway Company.	898	...	385 .4 (.43)
XII. Monthly bibliography of railways :			
I. Books	129	...	016 .385. (02
II. Periodicals	132	...	016 .385. (05

	PAGES.	NUMBERS of plates and figures.	NUMBERS of the decimal classification.
No. 11. — November 1928.			
I. **The Belgian Railways. Their present and future capacity**, by Ulysse LAMALLE	899	Figs. 1 to 3, pp. 901 to 908.	656 .222.4 (.493) & 656 .23 (.493)
II. **Central white stains in ingots** rolled before complete solidification, by Mr. VITEAUX	916	Figs. 1 to 10, pp. 917 to 920.	62. (01 & 669 .1
III. Proposed **turbine locomotive** design	922	Figs. 1 to 3, pp. 923 and 927.	621 .132.8
IV. **Statistics of rail breakages** during the year 1927	930	...	313 : 625 .143.3
V. MISCELLANEOUS INFORMATION :			
1. The use of **silicon steel in the construction of railway bridges**	1022	...	624. (0 & 669 .1
2. **High tonnage steel in modern bridges**	1022	...	624. (0 & 669 .1
VI. NEW BOOKS AND PUBLICATIONS :			
The Detroit Windsor Bridge over the Detroit River, by Charles Evan FOWLER	1024	...	624 .51 (01 (.73)
La Houille blanche. — L'électrification du Chemin de fer du Midi et l'essor économique de la région du Sud-Ouest. (**Water Power. — The electrification of the Midi Railway** and the economic development of the South-Western District)	1027	...	621 .31 (.44)
Elektrische Vollbahnlokomotiven (**Railway Electric Locomotives**) by Karl SACHS	1028	...	621 .335
VII. MONTHLY BIBLIOGRAPHY OF RAILWAYS :			
I. Books	143	...	016 .385. (02
II. Periodicals	146	...	016 .385. (05
No. 12. — December 1928.			
I. Note on the **calculation of rails** in relation to high train speeds, by Felice CORINI	1031	...	625 .143. (01
II. **Surface transverse fissures in rails**, by Ch. DANTIN	1041	Figs. 1 to 5, pp. 1041 to 1045.	625 .143.3
III. The **inverted macrostructure in certain lots of rails**, by E. DECHERF	1048	Figs. 1 to 8, pp. 1049 to 1054.	625 .143.2
IV. **Wood, metal and reinforced concrete sleepers**, compared by Mr. VINCENT	1056	Figs. 1 to 8, pp. 1059 to 1070.	625 .142
V. Notes on the **inverted segregation observed in certain rails**, by A. PORTEVIN	1073	Figs. 1 to 3, pp. 1074 & 1075.	625 .143.2
VI. The spot system of **repairing freight cars** on the Baltimore & Ohio Railroad	1076	Figs. 1 to 8, pp. 1077 to 1084.	625 .26 (.73)
VII. **Reconstruction of the gare de l'Est**, Paris	1085	Figs. 1 to 5, pp. 1086 to 1090.	656 .211.4 (.44) & 725 .31 (.44

No. 12. — December 1928 (Continued).	PAGES.	NUMBERS of plates and figures.	NUMBERS of the decimal classification.
VIII. Official information issued by the Permanent Commission of the International Railway Congress Association :			
Meeting of the permanent Commission held on the 30 June 1928	1092	...	385. (06. 111
Appendix 1 : **List of members of the Permanent Commission** of the International Railway Congress Association.	1094	...	...
— 2 : **Questions for discussion** at the Madrid session (1930) with the **names of the reporters**	1097	...	...
IX. Monthly bibliography of railways :			
I. Books	163	...	016 .385. (02
II. Periodicals	165	...	016 .385. (05
X. Contents of the 10th year of the English edition . . .	I to VIII	...	...
XI. Analytical table of articles according to the decimal classification.	1 to 10	...	...

ANALYTICAL TABLE OF ARTICLES

ARRANGED ACCORDING TO THE DECIMAL CLASSIFICATION

(1928)

	Month.	Page.
313. Statistics on special topics.		
313 .385. Railway statistics in general.		
The World's railways during the years 1922, 1923, 1924 and 1925	July.	608
313 : 625.14. Permanent way statistics.		
313 : 625 .143.3. Statistics of rail breakages.		
Statistics of rail breakages during the year 1927	November.	930
313 : 656 .222. Train mileage statistics.		
The centralisation and the simplification of mileage statistics and the rational solution of the problem on the Swiss Federal Railways, by Georges HARCAVI	August.	619
385. Railways from a general, economic and financial point of view.		
385. (01. Utility of railways and their influence on the economic development of the districts they traverse. Railways in new countries. Pioneer lines.		
The proposed Trans-Saharan railway	April.	365
385. (06. Societies, associations, scientific congresses.		
385. (06.111. International Railway Congress Association. Official documents.		
Questions for discussion at the Madrid Session (1930) with the names of the reporters.	March.	267
Meeting of the Permanent Commission held on the 30 June 1928	December.	1092
List of members of the Permanent Commission	»	1094
Questions for discussion at the Madrid Session (1930) with the names of the reporters.	»	1097
385. (06 2. Independent scientific societies.		
Association of Electrical Engineers graduates of the Montefiore Electrotechnical Institute, rue Saint-Gilles, 31, at Liége. Foundation of the George Montefiore triennal prize	October.	894
385. (09. History and description of railways.		
Railways of Japan.	August.	689

	Month.	Page.
385. (09.1. Descriptions, albums of views and photographs.		
Problemi ferroviari italiani. — Costruzioni, elettrificazioni, esercizio (Railway problems in Italy. — Construction, electrification and operation), by F. CORINI. (New book)	January.	93
African railways and gauges	April.	361
Improvements introduced by the Italian State Railways, by Luigi TOSTI	October.	809
385. (09.2. Obituary notices.		
Frank Percy Johnson PATENALL	"	896
385. (09.3. History of railways.		
25 Jahre Schweizerische Bundesbahnen (1902-1927) [25 years of the Swiss Federal Railways (1902-1927)], by Dr. A. WELTI. (New book)	January.	92
385 .1. Railways from a financial point of view. Their effect on a country's finances.		
385 .11. Cost of construction and revenue derived.		
385 .113. Results of working. Expenditure. Gross and net earnings. Ratio of expenditure to earnings.		
Operating results of the Italian State Railways for the year 1925-1926	"	88
Swiss railway electrification results, by Roger T. SMITH	February.	145
The German Railways during the second financial year of the German Railway Company (1926) as revealed in report No 5 of the Inspector of the German Railways to the Reparations Committee	March.	225
Annual statement for 1926 of the working of the French State Railways	June.	526
385 .4. Internal administrative organisation of railways.		
Reichsbahn Handbuch 1927 (Handbook of the State Railways), by the Central Administration of the German State Railway Company. (New book)	October.	898
385. 5. Staff.		
385 58. General matters concerning the staff.		
385 .581. Hours of labour.		
The regulation of hours of duty of the employees in the Operating Departments of the Swiss Federal Railways (A study of a code of laws), by Georges HARCAVI	March.	200
385 .586. Apprenticeship.		
A new undertaking in apprentice training, by H. ROBBINS.	January.	23
526. Geodesy.		
A generalized method for traverse surveys in open country, by A. H. DOUGLAS	September.	764
Notes on railway survey, by G. W. N. ROSE	"	788

	Month.	Page.
532. Liquids. Hydrostatics. Hydraulics.		
Traité théorique et pratique des distributions et canalisations d'électricité, d'eau, de vapeur et de gaz (Theoretical and practical treatise on the distribution of electricity, water, steam and gas), by Etienne PACORET	October.	897
62. Engineering.		
62. (01. Strength of materials. Physical tests.		
Negative or reversed segregation and white stain, by L. PICHARD	September.	751
Central white stain in ingots rolled before complete solidification, by Mr. VITEAUX	November	916
621. Mechanical engineering.		
621 .1 Steam engineering.		
Traité théorique et pratique des distributions et canalisations d'électricité, d'eau, de vapeur et de gaz (Theoretical and practical treatise on the distribution of electricity, water, steam and gas), by Etienne PACORET	October.	897
621 .13. Locomotive engines.		
621 .132. Class of locomotives.		
621 .132.1. Class of locomotives in different countries.		
Standardisation of unified design of locomotives of the German Railways, by Georges HARCAVI	February	95
Britisch locomotives in 1927 (designs and work), by J. F. GAIRNS	March	185
621. 132.3. Passenger engines with four or more coupled wheels.		
The Schmidt-Henschel high pressure locomotive	May.	418
621 .132.8. Special types.		
2 000 H. P. Ljungström turbine locomotive.	May.	429
Pulverized coal burning locomotive built in Germany, by Dr. Alfred GRADENWITZ.	October.	887
Proposed turbine locomotive design	November.	922
621 .133. Production of steam in locomotives.		
621 .133.1. Combustion. Fuel. Petroleum. Fuel consumption of locomotives.		
Pulverized coal burning locomotive built in Germany, by Dr. Alfred GRADENWITZ.	October.	887
621 133. Boiler shell. Plates Tubes.		
Nickel steel for locomotive boilers, by Charles McKNIGHT	October.	853
621 .133.5. Exhaust.		
Developments in locomotive drafting, by Dr. W. F. M. GOSS	January.	17

	Month.	Page.
621 .134. Steam engine.		
621 .134.3. High pressures.		
The Schmidt-Henschel high pressure locomotive	May.	418
621 .135. (01. Stability of the engine in motion. Variation of the distribution of load on the axles. Equalizing beams. Oscillation. Counterbalance weights.		
Locomotive weights and axle loads	March.	265
Some lessons of the Sevenoaks accident, by C. F. Dendy MARSHALL.	July.	598
621 .136. Tenders.		
621 .136.1. Arrangement. Weights. Brakes, etc.		
Locomotive tender with side corridor, London and North Eastern Railway	August	713
621 .138. Laying up and maintaining the locomotives.		
621 .138.5. Repairing shops. Important repairs.		
The reorganisation of Crewe locomotive works (Paper and discussion), by Captain H. P. M. BEAMES	»	665
The longitudinal shop	»	682
621 .139. Stores. Materials. Accounts.		
Pennsylvania Railroad experiments with budget for purchases	June.	505
621 .3. Electrical engineering		
Traité théorique et pratique des distributions et canalisations d'électricité, d'eau, de vapeur et de gaz (Theoretical and practical treatise on the distribution of electricity, water, steam and gas), by Etienne PACORET	October.	897
621 .31. Production and transformation of electrical power. Dynamos and motor engines, transformers, conductors and distribution in general.		
La Houille blanche. — L'électrification du Chemin de fer du Midi et l'essor économique de la région du Sud-Ouest. (Water power. — The electrification of the Midi Railway and the economic development of the South-Western District). (New book.)	November.	1027
621 .33 Electric traction. Railways. Tramways.		
Swiss railway electrification results, by Roger T. SMITH	February.	145
Regeneration and its effect on virtual lengths on electric railways, by Felice CORINI	June.	453
621 .335. Electric locomotives.		
Electric express passenger locomotive for the Great Indian Peninsula Railway	July.	569
Irregular vibratory movements of electric locomotives with inclined connecting rods by Dr. Kurt VOSSIUS	August.	657
500 B. H. P. oil-electric train for the London Midland and Scottish Railway.	October.	891
Electrische Vollbahnlokomotiven (Railway electric locomotives), by Karl Sachs. (New book)	November.	1028

	Month.	Page
621 39. Miscellaneous uses of electricity (Braking, welding, heating, etc.)		
621 .392. Electric welding.		
First all-welded truss railroad bridge is put in service	September.	757
621 .4. Air and gas engines and other motors.		
621 .43. Ignited gas engines		
500 B. H. P. oil-electric train for the London Midland and Scottish Railway	October.	891
621 .7. Mills and manufacturing works.		
Re-organisation of methods of carrying out repairs in the shops at the locomotive depots of the Paris-Orleans Railway Company, by J. PEZEU	May.	441
621 .8. Mill work and mechanism of transmission.		
621 .85. Machinery and mill gearing.		
White-metalling plant for the Central Argentine Railway	January.	85
624. Bridges and roofs.		
624. (0. General matters. Characteristics of materials used in building bridges and roofs.		
The present position as regards the question of dynamic influences on railway bridges, by A. RONSSE and R. DESPRETS	September.	717
French regulations for the calculation and the testing of metal bridges	October.	834
The German regulations for the calculation of metal road bridges	"	848
The use of silicon steel in the construction of railway bridges	November.	1022
High tonnage steel in modern bridges	"	1022
624 .3. Trussed bridges.		
624 .32. Metallic trussed bridges.		
First all-welded truss railroad bridge is put in service	September.	757
624 .5. Suspension bridges and bridges with cantilever girders.		
624 .51. Suspension bridges.		
The Detroit Windsor Bridge over the Detroit River, by Charles Evan FOWLER. (New book.)	November.	1024
624 .9. Roofs.		
624 .92. Iron roofs.		
Silicon steel for constructional use	October.	884

	Month.	Page.
625. Railway and road engineering.		
652 .1. Way and works.		
625 .11. Scheme for a railway.		
Simplified methods in the preparation of schemes for roads and railways, by Domenico RUGGERI	October.	851
625 .111. Preliminary work. General plan. Special points on the line (stations, junctions, structures, level crossings, tunnels).		
A generalized method for traverse surveys in open country, by A. H. DOUGLAS	September.	764
Notes on railway survey, by G. W. N. ROSE	»	788
625 .113. Longitudinal section. Gradients. Curves.		
The correction of curves on railways, by N. GIOVENE	May.	406
625 .13. Brick and masonry structures, bridges and tunnels. Ventilation of tunnels.		
Tunneling at Musconetcong now and fifty years ago	April.	343
Tunnel atmosphere tests on Chesapeake and Ohio Railroad	September.	804
625 .14. Permanent way.		
The evolution of track on American railways, as depicted in exhibits displayed at the Centenary Exhibition of the Baltimore & Ohio at Halethorpe, Md.	March.	257
What one year's service on concrete roadbed has shown, by P. CHIPMAN.	June.	471
625 .14 (01. Theory. General matters. Calculation of strains.		
Some lessons of the Sevenoaks accident, by C. F. Dendy MARSHALL	July.	598
625 .142. Supports.		
Wood, metal and reinforced concrete sleepers compared, by Mr. VINCENT.	December.	1056
625 .142.2. Timber supports.		
The use of colonial timber for railway sleepers	June.	479
625 .143. Rails and their fastenings.		
Note on the calculation of rails in relation to high train speeds, by Felice CORINI	December.	1031
625 .143.2. Quality of the metal for rails. Specifications. Conditions of manufacture and tests.		
Means for improving steel rails	April.	358
The manufacture of sound rails by the Courthéoux method of rolling, by L. PICHARD.	July.	550
The inverted macrostructure in certain lots of rails, by E. DECHERF	December.	1048
Note on the inverted segregation observed in certain rails, by A. PORTEVIN	»	
625 .143.3. Wear and breaking of rails.		
The wear of tyres and rails, by E. GUIRAUD	January.	11
A contribution to the study of rail corrugation, by Ch. FRÉMONT.	April.	275

	Month.	Page.
rstate Commerce Commission (U. S. A.).— Report of the Director of the Bureau f Safety in re-investigation of an accident which occurred on the St. Louis-San Francisco Railway near Victoria, Miss., on 27 October 1925	April.	280
ct of unsprung car weight on track wear.	July.	615
face transverse fissures in rails, by Ch. DANTIN	December.	1041
.143.5. Means of fastening rails to supports. Creeping of rails.		
ring plates with ribs in permanent way work by Dr. Th. BUCHHOLZ	May.	386
5 .17. **Permanent way. Maintenance and renewal.**		
onstruction of a large railway engineering depot	July.	558
.176. Alteration of gauge.		
ican railways and gauges	April.	361
5 .18 **Stores. Permanent way materials. Accounts.**		
nsylvania Railroad experiments with budget for purchases	June.	505
5 .2. Railway rolling stock.		
tures et wagons — Matériel, freinage, éclairage, chauffage. (Carriages and vagons. — Construction, brakes, lighting, heating), by J. NETTER. (New book.) .	May.	450
5 .21. Principle parts of the vehicle.		
5 .212. Axles. Wheels. Tyres. Balancing of the wheels.		
e wear of tyres and rails, by E. GUIRAUD	January.	11
5 .23. Passenger carriages.		
5 .232. Corridor carriages. Carriages of express trains (sleeping cars, lining cars, etc)		
e new steel rolling stock for express trains of the French Northern Railway Company, by Mr. DE CASO	September.	724
5 .234. Heating and ventilation.		
ating and ventilation of passenger cars, by E. A. RUSSELL.	May	411
5 .236. Disinfection.		
aning passenger car equipment, by F. W. STEVENS	June.	488
5 .24 Goods wagons.		
5 .243. Covered wagons.		
lway wagons with collapsible roofs, Swedisch State Railways, by A. PAULSON .	October.	885
5 .245. Special wagons.		
d-rail traffic on the London Midland & Scottish Railway.	March.	260
ual side-pivot drop-door air dump car.	June.	534
5 25. Brakes.		
.251. *General matters* : Experiments concerning friction. Theory of raking.		
culating the stopping distances of trains, by G. E. TERWILLIGER	October.	864

	Month	Page.
625 .258. Brakes applied to the rails.		
Appliances for braking wagons in marshalling yards controlled from a distance, by L. CADIS	January	5
Car retarders at Mechanicville	July.	574
Car retarders at Selkirk yard, by R. B. ELSWORTH	August.	684
Yard costs cut 17 per cent	October.	877
625 .26 Carriage and wagon repairing shops.		
The spot system of repairing freight cars on the Baltimore and Ohio Railroad	December.	1076
625 .27. Stores. Materials. Accounts.		
Pennsylvania Railroad experiments with budget for purchases	June.	505
625 .4. Elevated and underground railways. Subways.		
Mails by underground. Post office (London) Tube Railway	March.	252
The railway formula for extra-light ultra-high speed high capacity transportation, by L. HIRSCHAUER and A. TALON.	May.	369
625 .6. Light railways. Tramways.		
625 .61. Light railway engineering		
Signalling on electric tramways, by Roger VENTE	February.	167
656. Transportation. Railroading, etc.		
656 .1. Carriage by road.		
Railway and motor competition in Switzerland	March.	247
Railway road services in France. Developments of the Paris, Lyons and Mediterranean Railway autocar system	July.	602
656 .2. Carriage by railway.		
Railway and motor competition in Switzerland	March.	247
Railway road services in France. Developments of the Paris, Lyons and Mediterranean Railway autocar system	July.	602
656 .21. Station working.		
656 .211. Passenger station arrangements.		
656 .211.4 Termini.		
Reconstruction of the Gare de l'Est, Paris	December.	1085
656 .211.5. Details of passenger stations : platforms, sheds and shelters; arrangements for departure and arrival ; station conveniences.		
The main passenger station building of the new Milan station, by A. FAVA	July.	537

	Month.	Page.
656 .212. Goods station arrangements.		
656 .212.5. Marshalling yards.		
Comprehensive reports speed yard operations at Selkirk	June.	497
Reconstruction of a large railway engineering depot	July.	558
656 .215. Lighting of stations.		
The lighting of railroad yards, by H. E. MAHAN and R. J. SWACKHAMER	June.	491
656 .22. Trains.		
656. 222. Running of trains.		
656 .222.1. Speed and load.		
A comparison of British and French train speeds	July.	612
656 .222.4. Capacity of lines and working of trains.		
The Belgian Railways. Their present and future capacity, by Ulysse LAMALLE	November.	899
656 .23. Traffic and rates.		
The Belgian Railways. Their present and future capacity, by Ulysse LAMALLE	"	899
656 .25. Safety measures. Signals.		
656 .253. Fixed and station signals. Fog signals.		
Speed signal aspects. Flashing lights in railway working, by C. W. PRESCOTT	July	594
656 .256. Block-system.		
Signalling on electric tramways, by Roger VENTE	February.	167
An ingenious semi-automatic signalling installation	July.	581
656 .256.3 Automatic block-system.		
The automatic blok system in the United States	January.	37
Automatic block signalling organisation on the Netherland State Railways, by J. H. VERSTEGEN	February.	116
656 .257. Combined working of signals and points. Wire and rigid connection. Direct interlocking.		
811-lever power signal frame for London Bridge, Southern Railway	October.	869
656 .259. Other safety measures. (Inter-communication and inter-communicating apparatus on trains Speed recorders situated on trains or on the line, treadles).		
Appliances for braking wagons in marshalling yards controlled from a distance, by L. CADIS	January.	5
Car retarders at Mechanicville	July.	574
Car retarders at Selkirk yard, by R. B ELSWORTH	August.	684
Yard costs cut 17 per cent	October.	877
656 .26. Accessory services.		
656 261. Collection and delivery.		
Road-rail traffic on the London Midland & Scottish Railway	March.	260

	Month.	Page.
656 .28. Accidents.		
656 .281. Derailments.		
Some notes on unexplained derailments, by P. SEDGFIELD	February.	150
Interstate Commerce Commission (U. S. A.) — Report of the Director of the Bureau of Safety in re-investigation of an accident which occured on the St. Louis-San Francisco Railway near Victoria, Miss., on 27 October 1925	April.	280
Freight car derailments, by T. H. SYMINGTON	June.	517
665. Lighting industry.		
Traité théorique et pratique des distributions et canalisations d'électricité, d'eau, de vapeur et de gaz (Theoretical and practical treatise on the distribution of electricity, water, steam and gas), by Etienne PACORET (New book)	October.	897
669. Metallurgy and assaying.		
669 .1. Iron and steel.		
Negative or reversed segregation and white stain, by L. PICHARD	September.	751
Nickel steel for locomotive boilers, by Charles McKNIGHT	October.	853
Silicon steel for constructional use	»	884
Central white stains in ingots rolled before complete solidification, by Mr. VITEAUX	November.	916
The use of silicon steel in the construction of railway bridges	»	1022
High tonnage steel in modern bridges	»	1022
725. Public buildings.		
725 .3. Transportation and storage.		
725 .31. Railway passenger stations.		
Reconstruction of the Gare de l'Est, Paris	December.	1085
725 .33. Railway shops, round houses, car houses, water supply and storage, stores.		
Reconstruction of a large railway engineering depot	July.	558
The reorganisation of Crewe locomotive works (Paper and discussion), by Captain H. P. M. BEAMES	August.	665
The longitudinal shop	»	682